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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,843	09/25/2003	Keith A. Phillips	111691.00002	8694

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EXAMINER

PRUNNER, KATHLEEN J

ART UNIT	PAPER NUMBER
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3751

DATE MAILED: 10/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,843

Applicant(s)

PHILLIPS, KEITH A.

Examiner

Kathleen J. Prunner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Drawings***

1. The drawings are objected to because in, Figs. 1 and 2, "20" should be changed to --20-- with an arrowed line indicating the wand or gun; it now appears that only a space is being identified by "20". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. In addition to Replacement Sheets containing the corrected drawing figure(s), applicant is required to submit a marked-up copy of each Replacement Sheet including annotations indicating the changes made to the previous version. The marked-up copy must be clearly labeled as "Annotated Marked-up Drawings" and must be presented in the amendment or remarks section that explains the change(s) to the drawings. See 37 CFR 1.121(d). Failure to timely submit the proposed drawing and marked-up copy will result in the abandonment of the application.

Specification

3. The following informalities in the claims are noted: (A) in claim 1, on line 8, "for disposing" should be changed to read --being disposed--; (B) in claim 15, on line 3, "for disposing" should be changed to read --being disposed--; and (C) in claim 24, on line 2, "for disposing" should be changed to read --to be disposed--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 6, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Pfeifer et al. Pfeifer et al. disclose a water heating system having all the claimed features including a steam heater (constituted by boiler 14) for generating steam, a wand 20 for injecting the steam into a body of liquid or water, and a flexible tubing (note Fig. 1 and the tubing that connects the wand 20 to the valve 46) coupled between the steam heater 14 and wand 20 to transfer the steam from the steam heater 14 to the wand 20. With regard to claim 12, it is considered that the flexible tubing of Pfeifer et al. is inherently made from non-corrosive material in order to protect the user from leaks caused by such corrosion and to extend the useful lifetime of the device. With respect to claim 14, it is considered that the apparatus 10 of Pfeifer et al. inherently forms a stand for supporting the wand 20.

6. Claims 6, 8, 9, 12, 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Jung, Jr. Jung, Jr., discloses a water heating system having all the claimed features including a steam heater or generator 54 for generating steam, a wand or gun 58, and flexible tubing or hose 56 coupled between the steam heater 54 and wand or gun 58 to transfer the steam from the steam heater 54 to the wand or gun 58 (note lines 41-44 in col. 9). With respect to claim 6, it is

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considered that the wand or gun 58 of Jung, Jr., is capable of being used to inject steam into a body of water. With regard to claim 8, Jung, Jr., also discloses that the wand or gun 58 includes a trigger assembly or device 62 for enabling the steam to be ejected from an exit point of the wand or gun 58. With regard to claim 9, Jung, Jr., further discloses that the wand or gun 58 includes a grip or handle 60 for grasping the wand or gun 58, a barrel (constituted by nozzle 64) coupled to the grip or handle 60, and a non-corrosive tubing 56 within the barrel for transferring the steam to the exit point of the wand or gun 58 (note lines 44-49 in col. 9). With respect to claim 12, it is considered that the flexible tubing or hose 56 of Jung, Jr., is inherently made from non-corrosive material in order to protect the user from leaks caused by such corrosion and to extend the useful lifetime of the device. With respect to claim 14, Jung, Jr., also discloses a stand (constituted by hanging rod 66) for supporting the wand or gun 58 (note lines 56-59 in col. 9).

7. Claims 6, 10-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Singfield. Singfield discloses a water heating system (note lines 20-21 in col. 7) having all the claimed features including a steam heater (constituted by the boiler unit with outer shell 20, note Fig. 2) for generating steam (note lines 34-46 in col. 5), a wand (constituted by vapor gun 12) for injecting the steam into a body of water (note Fig. 1 and lines 49-52 in col. 8), a flexible tubing (constituted by trunk line 18) coupled between the steam heater and wand 12 to transfer the steam from the steam heater to the wand 12. With respect to claim 10, Singfield also discloses an energy source (constituted by generator 15, note Fig. 1) supplying energy to the steam heater, and it is considered that the floating vessel 10 of Singfield inherently constitutes a cart for transporting the steam heater and energy source. With respect to claim 11, it is considered that the floating vessel 10 of Singfield inherently constitutes a motorized cart for transporting the steam heater and energy source. With respect to claim 12, it is considered that the flexible tubing 18 of Singfield is inherently made from non-corrosive material in order to protect the user from leaks caused by such corrosion and to extend the useful lifetime of the device. With regard

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to claim 14, it is considered that the cable feed system 17 of Singfield inherently constitutes a stand for supporting the wand 12.

8. Claims 15, 17, 22, 24, 26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowen. Bowen discloses a water heating system for injecting steam into a body of water having all the claimed features including a network of piping within the support structure containing the body of water (note Fig. 1), a plurality of steam ports 33 coupled to exit points of the network of piping into the body of water, and a steam generator 30 for providing steam through an outlet which is coupled to the network of piping for transporting the steam to the steam ports 33 and injecting the steam into the body of water (note lines 4-8 in col. 2). With respect to claims 22 and 28, Bowen also discloses that the steam ports 33 are provided along the sidewalls of the support structure containing the body of water (note Fig. 1). With regard to claims 17 and 26, it is considered that the piping of Bowen is inherently made from non-corrosive material in order to protect the user from leaks caused by such corrosion and to extend the useful lifetime of the device.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 2, 4, 16, 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen in view of Schindler et al. With respect to claims 1 and 25, Bowen discloses a dual water heating system having the claimed features including a pump 44 for pumping water from a body of water, a filter 48 having an input coupled to an outlet of the bath 10 for filtering the water, a network of piping within the support structure containing the body of water (note Fig. 1), a plurality of steam ports 33 coupled to exit points of the network of piping into the body of

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water, and a steam generator 30 for providing steam through an outlet which is coupled to the network of piping for transporting the steam to the steam ports 33 and injecting the steam into the body of water (note lines 4-8 in col. 2). Although Bowen fails to disclose a water heater having an input coupled to an outlet of the filter and having an outlet for returning heated water to the body of water, attention is directed to Schindler et al. who disclose another water heating system for a pool 10 having a closed water circulation system that includes a pump 30, a filter 32 having an input coupled to an outlet of the pump 30 for filtering the water, and a water heater 40 having an input coupled to an outlet of the filter 32 and having an outlet for returning heated water to the body of water in the pool 10 (note the Figure). It would have been obvious to one of ordinary skill in the pool water heating art, at the time the invention was made, to provide the water circulating circuit of Bowen with a filter downstream of the pump and with a water recirculating coupling in view of the teachings of Schindler et al. in order to provide a closed water circulating system for a pool wherein the water heater is provided with filtered water taken from the pool so as to avoid contamination of the water heater elements. With respect to claims 2 and 17, it is considered that the piping of Bowen is inherently made from non-corrosive material in order to protect the users from leaks caused by such corrosion and to extend the useful lifetime of the device. With regard to claim 4, Bowen also discloses that the steam ports 33 are provided along sidewalls of the support structure containing the body of water (note Fig. 1).

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen in view of Schindler et al., as applied to claims 1, 2, 4, 16, 17 and 25 above, and further in view of Bussman. Bowen further discloses an energy source supplying energy to the steam heater (note lines 1-3 in col. 2). Although Bowen fails to disclose a cart for transporting the steam heater and energy source, attention is directed to Bussman who discloses another pool water heater which can be mounted on a cart or carriage 10 in order to provide portability of the heater (note lines 3-4 and 37-42 in col. 2). It would have been obvious to one of ordinary skill in the pool water heating art, at the time the invention was made, to mount the water heater of Bowen on a cart or

carriage in view of the teachings of Bussman in order to provide portability of the heater so that it can be used with different pools or be stored away when it is not needed.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen in view of Schindler et al., as applied to claims 1, 2, 4, 16, 17 and 25 above, and further in view of Collins. Although Bowen fails to disclose using protective covers disposed over the plurality of steam ports 33, attention is directed to Collins who discloses a steam bath provided with a tub 14 and a steam generator 16 wherein the steam is introduced into the tub 14 through a steam port or aperture 42 and a baffle 46 is provided in front of the steam port or aperture 42 in order to prevent the steam from discharging directly onto the user (note lines 22-28 in col. 2). It would have been obvious to one of ordinary skill in the water heating art, at the time the invention was made, to provide each steam port 33 of Bowen with protective cover in the form of a baffle in view of the teachings of Collins in order to prevent the steam from directly discharging onto the user so that burning or scalding the user is avoided.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Singfield in view of Schindler et al. Singfield also discloses that his device can be used to heat large circulating volumes of liquids (note lines 20-21 in col. 7). Although Singfield fail to disclose that the large circulating volume of a liquid could be a pool, attention is directed to Schindler et al. who disclose another large circulating volume of liquid in the form of a pool having a pump 30, a filter 32 having an input coupled to an outlet of the pump 30 for filtering the water, and a water heater 40 having an input coupled to an outlet of the filter 32 and having an outlet for returning heated water to the body of water in the pool 10 (note the Figure). It would have been obvious to one of ordinary skill in the large circulating water heating art, at the time the invention was made, to provide the large circulating water volume of Singfield with a filter downstream of the pump and with a water recirculating coupling in view of the teachings of Schindler et al. in order to provide a closed water circulating system for a pool wherein the water heater is provided with filtered water taken from the pool so as to avoid contamination of the water heater elements.

14. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pfeifer et al. in view of Jung, Jr. With respect to claim 8, although Pfeifer et al. fail to disclose a trigger assembly for activating the wand 20, attention is directed to Buckley et al. who disclose another steam wand or gun 10 having a trigger assembly 22 in order to easily and safely operate the steam wand or gun (note lines 45-50 in col. 1). It would have been obvious to one of ordinary skill in the liquid or water heating art, at the time the invention was made, to form the wand of Pfeifer et al. with a trigger assembly in view of the teachings of Buckley et al. in order to easily and safely operate the steam wand or gun and to enable the user to better control the amount of steam being introduced into the body of liquid or water. With regard to claim 9, although Pfeifer et al. fail to disclose the specific structure defining the steam wand 20, attention is directed to Jung, Jr., who discloses another steam wand or gun 58 which can be hand operated and controlled by having a trigger assembly 62 in order to easily and safely operate the steam wand or gun (note lines 45-50 in col. 1). It would have been obvious to one of ordinary skill in the liquid or water heating art, at the time the invention was made, to form the wand or gun of Singfield with a hand operated and controlled trigger assembly in view of the teachings of Jung, Jr., in order to easily and safely operate the steam wand or gun and to enable the user to better control the amount of steam being emitted from the wand or gun. With regard to claim 9, Jung, Jr., further teaches the obviousness of forming the wand or gun with a grip (constituted by the wooden handle 60) and a barrel (constituted by the nozzle 64) coupled to the grip 60 and of using a non-corrosive tubing (constituted by the steam hose 56) within the barrel for transferring the steam to the exit point of the wand or gun.

15. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Singfield in view of Jung, Jr. Although Singfield fails to disclose that the gun or wand 12 can be hand operated by the use of a trigger assembly, attention is directed to Jung, Jr., who discloses another steam wand or gun 58 which can be hand operated and controlled by having a trigger assembly 62 in order to easily and safely operate the steam wand or gun (note lines 45-50 in col. 1). It would have been obvious to one of ordinary skill in the liquid or water heating art, at the time the

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invention was made, to form the wand or gun of Singfield with a hand operated and controlled trigger assembly in view of the teachings of Jung, Jr., in order to easily and safely operate the steam wand or gun and to enable the user to better control the amount of steam being emitted from the wand or gun. With regard to claim 9, Jung, Jr., further teaches the obviousness of forming the wand or gun with a grip (constituted by the wooden handle 60) and a barrel (constituted by the nozzle 64) coupled to the grip 60 and of using a non-corrosive tubing (constituted by the steam hose 56) within the barrel for transferring the steam to the exit point of the wand or gun.

16. Claim 13 is are rejected under 35 U.S.C. 103(a) as being unpatentable over Singfield in view of Harbin, III. Although Singfield fails to disclose the material from which the flexible tubing 18 is made, attention is directed to Harbin, III, who discloses another water heating system having the tubing or hose assembly 51 formed of flexible stainless steel in order to enable the hose assembly to withstand the high heat and pressure of the water heating system (note lines 4-12 in col. 7). It would have been obvious to one of ordinary skill in the liquid or water heating art, at the time the invention was made, to make the flexible tubing 18 of Singfield of flexible stainless steel in view of the teachings of Harbin, III, in order to enable the hose assembly to withstand the high heat and pressure of the water heating system.

17. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jung, Jr., in view of Harbin, III. Although Jung, Jr., fails to disclose the material from which the tubing or hose 56 is made, attention is directed to Harbin, III, who discloses another water heating system having the tubing or hose assembly 51 formed of flexible stainless steel in order to enable the hose assembly to withstand the high heat and pressure of the water heating system (note lines 4-12 in col. 7). It would have been obvious to one of ordinary skill in the liquid or water heating art, at the time the invention was made, to make the hose 56 of Jung, Jr., of flexible stainless steel in view of the teachings of Harbin, III, in order to enable the hose assembly to withstand the high heat and pressure of the water heating system.

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18. Claims 18 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen in view of Harbin, III. With respect to claim 18, although Bowen fails to disclose the material from which the piping is made, attention is directed to Harbin, III, who discloses another water heating system having the piping or hose assembly 51 formed of flexible stainless steel in order to enable the hose assembly to withstand the high heat and pressure of the water heating system (note lines 4-12 in col. 7). It would have been obvious to one of ordinary skill in the liquid or water heating art, at the time the invention was made, to make the piping of Bowen of flexible stainless steel in view of the teachings of Harbin, III, in order to enable the hose assembly to withstand the high heat and pressure of the water heating system. With regard to claim 23, Harbin, III, further teaches the obviousness of using a detachable coupling for connecting the outlet of the steam heater to the system piping or tubing (note lines 53-65 in col. 5).

19. Claims 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen in view of Bussman. Bowen further discloses an energy source supplying energy to the steam heater (note lines 1-3 in col. 2). Although Bowen fails to disclose a cart for transporting the steam heater and energy source, attention is directed to Bussman who discloses another pool water heater which can be mounted on a cart or carriage 10 in order to provide portability of the heater (note lines 3-4 and 37-42 in col. 2). It would have been obvious to one of ordinary skill in the pool water heating art, at the time the invention was made, to mount the water heater of Bowen on a cart or carriage in view of the teachings of Bussman in order to provide portability of the heater so that it can be used with different pools or be stored away when it is not needed.

20. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen in view of Cox. With respect to claim 19, Bowen further discloses an energy source supplying energy to the steam heater (note lines 1-3 in col. 2). Although Bowen fails to disclose a cart for transporting the steam heater and energy source, attention is directed to Cox who discloses another pool water heater which is mounted on a motorized cart (constituted by the self-propelled support structure 18, such as a truck 50 or other motorized vehicle, note lines 41-48 and 60-65 in col. 2) in order to provide transportability. It would have been obvious to one of

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ordinary skill in the pool water heating art, at the time the invention was made, to mount the water heater of Bowen on a motorized cart or carriage in view of the teachings of Cox in order to provide transportability of the heater so that it can be used with different pools or be stored away when it is not needed.

21. Claims 21 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowen in view of Collins. Although Bowen fails to disclose using protective covers disposed over the plurality of steam ports 33, attention is directed to Collins who discloses a steam bath provided with a tub 14 and a steam generator 16 wherein the steam is introduced into the tub 14 through a steam port or aperture 42 and a baffle 46 is provided in front of the steam port or aperture 42 in order to prevent the steam from discharging directly onto the user (note lines 22-28 in col. 2). It would have been obvious to one of ordinary skill in the water heating art, at the time the invention was made, to provide each steam port 33 of Bowen with protective cover in the form of a baffle in view of the teachings of Collins in order to prevent the steam from directly discharging onto the user so that burning or scalding the user is avoided.

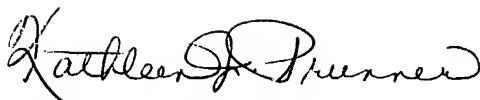
Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kathleen J. Prunner whose telephone number is 703-306-9044. In mid to late November, 2004, the examiner's office will move to the new complex in Alexandria, Virginia. Upon moving to the new complex, the examiner's new telephone number will be 571-272-4894.

23. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory L. Huson can be reached on 703-308-2580. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

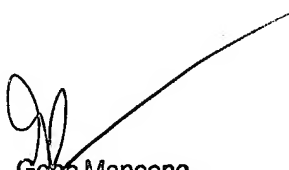
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24. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kathleen J. Prunner

October 7, 2004



Gene Mancene
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